

### **REMARKS**

Claims 1-23 and 35-42 are currently pending in the present application. Claims 16-18 are withdrawn from further consideration as being directed to a non-elected species. Claims 1, 10, 11, 13, 20, 22, 37-39 and 42 have been amended. No new matter is added.

In the outstanding Advisory Action, the Examiner indicated that the May 20, 2009 Amendment was not entered into the Official Record. As such, Applicants have used the underlining and strikethrough formatting to show changes to the claims when compared to the last set of claims which is part of the Official Record, i.e., the set of claims in the October 30, 2008 Amendment.

No new issues have been raised which would require additional search and/or consideration on the part of the Examiner.

Applicants now comment on the Examiner's comments given at page 2 of the Advisory Action.

#### **Issue under 35 U.S.C. § 112, first and second paragraphs**

The Examiner has maintained the rejection of claims 1-15, 19-23 and 34-42 under 35 U.S.C. § 112, first paragraph for containing new matter. Also, the Examiner has maintained the rejection of claims 1-15, 19-23 and 34-42 under 35 U.S.C. §112, second paragraph as being indefinite. Applicants respectfully traverse the rejections.

In the Advisory Action, the Examiner states:

For example, claims 1 and 11 is vague and indefinite because, although claims 1 and 11 require that a solid phase-holding member connects to the leading end part of a cylindrical syringe, since the claim does not require that the solid phase-holding member is inside of the cylindrical syringe, if the solid phase-holding member is outside of the cylindrical syringe and connects to the leading end part of a cylindrical syringe, it is unclear how the solid phase, which is accommodated in said solid phase-holding member, can locate only at the first opening part.

In response, Applicants have amended claims 1 and 11 as follows:

located within the solid phase-holding member and [[only at]] at an opening of the first opening part of the cylindrical syringe

In addition, the Examiner states:

Furthermore, although the specification describes an apparatus for separating and purifying nucleic acids, comprising (a) a solid phase, (b) a container having at least two openings for accommodating said solid phase, (c) a pressure difference generating apparatus coupled to one of the openings of said container and (d) a pressure sensor (e.g. see original filed claim 34), the specification fail to define or provide any disclosure to support the phrase “the pressure difference-generating apparatus which couples to one of the first and second opening parts” recited in claims 1 and 11 since one of the first and second opening parts is different from one of the first and second openings (see Figure 1 of the specification). Thus proposed amendments in claims 1 and 11 raise the issue of new matter.

In the above-reproduced passage, the Examiner cites from a section of the specification referring to an “opening” being coupled with the pressure difference-generating apparatus. The “opening” (which is coupled with the pressure difference-generating apparatus) is in the “container” as described in Figs. 8 and 9. It is clear when combining the description in Figs. 8 and 9 with the description of Figs. 1 and 2, that one “opening” is an opening in the “first opening part” which is adjacent the solid phase and another “opening” is an opening in the “second opening part” which is coupled to the pressure difference-generating apparatus. As such, Applicants have amended claim 1 as follows:

a solid phase comprising an organic polymer having a hydroxyl group on the surface thereof, wherein the solid phase is accommodated in said solid phase-holding member, located within the solid phase-holding member and [[only at]] at an opening of the first opening part of the cylindrical syringe, and absorbs and desorbs nucleic acids in the sample solution;

a pressure difference-generating apparatus; and

a pressure sensor capable of detecting the pressure in the accommodation part being connected to an operation part of the pressure difference-generating apparatus which couples to ~~one of the first and second opening parts~~ the opening of the second opening part.

Also, Applicants have amended claim 11 in a similar manner.

Applicants now reiterate the relevant comments made in the May 20, 2009 Amendment regarding the rejection under 35 USC 112, second paragraph.

Hereinafter, Applicants respond to the Examiner's rejections using the section numbers of the February 24, 2009 Office Action.

**10.** Claim 1 or 11 reciting the phrase "a solid phase comprising an organic polymer having a hydroxyl group on the surface thereof is accommodated in said solid phase-holding member" has been changed to recite "a solid phase comprising an organic polymer having a hydroxyl group on the surface thereof, **wherein the solid phase is accommodated in said solid phase-holding member**" (emphasis added).

**13.** As correctly pointed out by the Examiner, since claims 1 and 11 recite "the accommodation part being able to hold a sample solution" respectively, i.e., claims 1 and 11 do not require that the accommodation part must contain a sample solution.

To clarify, the term "is sensed by" of claim 13 has been changed to "can be sensed by".

**14 & 16.** The Examiner indicates that claims 20 and 22, depending on claim 1 indirectly, are not clear as to whether a pressure sensor of claims 20 or 22 is identical to that of claim 1.

To clarify this, "a pressure sensor" in claims 20 and 22 has been changed to "the pressure sensor".

**15.** The Examiner indicates that since step (d) does not require discharging the sample solution, claim 20 is indefinite.

To address this rejection, claim 20 has been amended to recite "wherein in steps (b), (d) and (f), the pressure sensor capable of detecting the pressure in the accommodation part is used to monitor the pressure in the accommodation part to sense the discharge of the sample solution in step (b), the nucleic acid washing buffer in step (d) or the liquid capable of desorbing nucleic acids in step (e) in the accommodation part by a pressure change, and wherein steps (c) and (e)

start after sensing the discharge of the sample solution in step (b) or the nucleic acid washing buffer in step (d)."

**17 & 18.** Claim 34 is cancelled.

**19.** The Examiner indicates that claim 39 or 42 depending on claim 1 indirectly fails to have sufficient antecedent basis requirement.

These claims have been amended to have sufficient antecedent basis.

### **Drawings**

Figures 1 and 3 have been resubmitted herewith to more clearly define reference numeral 11.

These changes only exist for clarification. Specifically, the arrow position of a reference numeral 11 representing a first opening part has been amended to more accurately indicate the same opening part. The present submission is supported by Fig. 2 and the present specification at page 11. Thus, no new matter has been added.

Applicants respectfully request that the Examiner withdraws all rejections and allow the currently pending claims.

Therefore, indication thereof by the Examiner in the next Office Action is respectfully requested.

### **CONCLUSION**

In view of the above amendments and Remarks, Applicants believe that the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M, Dahlen, Ph.D., Esq., Reg.

No. 43,575, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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Attachments: Figures 1 and 3